

## SHORT COMMUNICATION

### A NEW SPECIES OF *DRASSYLLUS* (ARANEAE, GNAPHOSIDAE) FROM WEST TEXAS

**Norman I. Platnick:** American Museum of Natural History, Central Park West at 79th Street, New York, New York 10024 USA. E-mail: platnick@amnh.org

**Norman Horner:** Midwestern State University, 3410 Taft, Wichita Falls, Texas 76308 USA

**ABSTRACT.** A new species, *Drassyllus broussardi*, is described from Presidio County, West Texas, USA. The species belongs to the *insularis* group but has a distinctively elongated embolus in males and concomitantly elongated copulatory ducts in females.

**Keywords:** Zelotinae, Texas, Presidio County, *insularis* group

The zelotine gnaphosid genus *Drassyllus* includes a substantial fraction of the North American ground spider fauna; the 61 currently known New World species, found from southern Canada to southern Mexico, have been assigned to eight species groups (Platnick & Shadab 1982; Platnick 1984; Platnick & Corey 1989).

Midwestern State University, at Wichita Falls, Texas, recently received a donation of land straddling Presidio and Brewster Counties in West Texas for research aimed at understanding the operation of a desert ecosystem. This parcel, the Dalquest Research Site, is near the Big Bend Ranch State Park and provides a valuable opportunity to study a relatively undisturbed portion of Chihuahuan desert. Under the direction of the second author, a survey of the spider fauna of the Dalquest Research Site was carried out by Mr. Greg Broussard as part of his M.S. degree research. Unsurprisingly, a number of unusual and relatively unfamiliar spiders occur at the site, and we report here on one of them: a gnaphosid ground spider belonging to the *insularis* group of *Drassyllus*. The largest of the eight species groups, the *insularis* group includes taxa primarily from the western United States, along with many Mexican endemics (Platnick & Shadab 1982). The group is not well known, especially in Mexico, where many of the species are so far identified only from females. Nevertheless, the species found at the Dalquest site differs clearly from all the previously known taxa, and is here newly described.

We thank Dr. Mohammad Shadab of the American Museum of Natural History for his work on the illustrations. Specimens are housed in the collections of the American Museum of Natural History,

New York (AMNH) and Midwestern State University, Wichita Falls, Texas (MWSU).

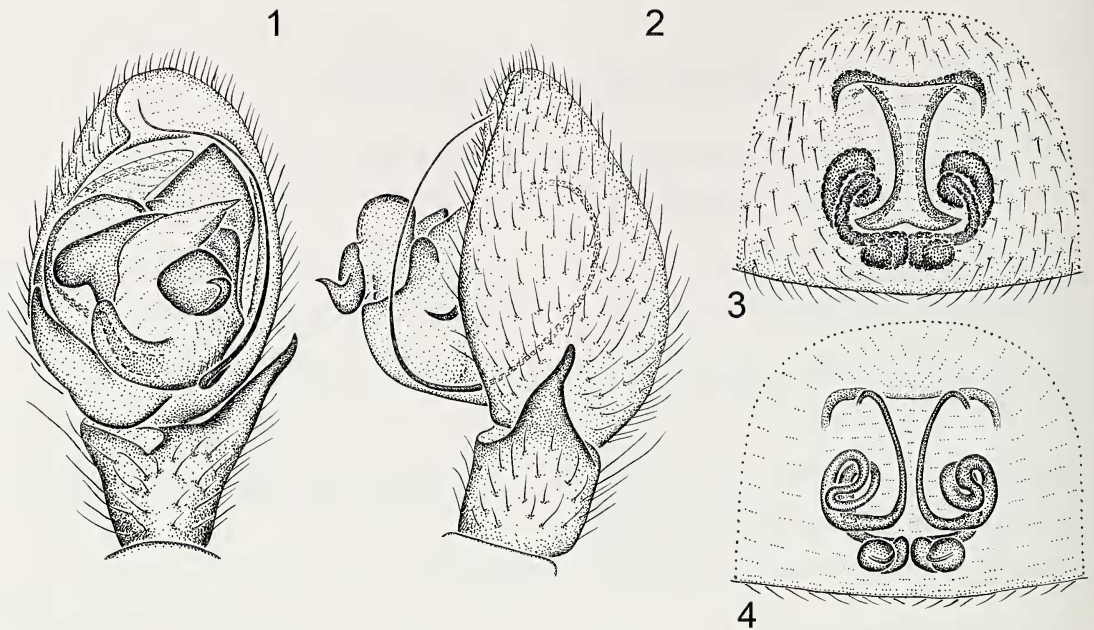
Family Gnaphosidae Pocock 1898  
Genus *Drassyllus* Chamberlin 1922

**Type species.**—*Drassyllus fallens* Chamberlin 1922, by original designation.

*Drassyllus broussardi* new species  
Figs. 1–4

**Types.**—Holotype male taken in uncovered, dry pitfall trap at an elevation of 1,267 m at the Dalquest Research Site, 29°33.41'N, 103°47.65'W, Presidio County, Texas, USA, 8 August 2005, N. Horner, J. Rogers (AMNH). Allotype female taken in covered, propylene glycol pitfall trap at the same locality 22 July–7 August 2005, N. Horner (AMNH).

**Other material examined.**—USA: Texas: Presidio County: 7 ♂, Dalquest Research Site, 29°33.41'N, 103°47.65'W, elev. 1267 m, 6–19 August 2004, pitfalls, N. Horner (AMNH); 4 ♂, same location, 20 August–4 September 2004, pitfalls, N. Horner (AMNH); 5 ♂, same location, 22 July–7 August 2005, covered glycol pitfalls, N. Horner (AMNH); 2 ♂, same location, 7 August 2005, uncovered alcohol pitfalls, N. Horner (AMNH); 1 ♂, 1 ♀, same location, 8 August 2005, covered dry pitfalls, N. Horner, J. Rogers (MWSU); 1 ♀, same location, 9 August, 2005, uncovered dry pitfall, N. Horner, J. Rogers (AMNH); 3 ♂, same location, 11 August–10 September 2005, uncovered glycol pitfalls, N. Horner (AMNH); 2 ♂, 2 ♀, same location, same date, covered glycol pitfalls, N. Horner (AMNH).



Figures 1–4.—*Drassyllus broussardi*, new species: 1. Left male palp, ventral view; 2. Left male palp, retrolateral view; 3. Epigynum, ventral view; 4. Epigynum, dorsal view.

**Etymology.**—The specific name is a patronym in honor of Greg H. Broussard, in recognition of the many valuable specimens taken in his survey work at the type locality.

**Diagnosis.**—The pair of median extensions on the anterior epigynal ducts (Fig. 4) support the assignment of this species to the *insularis* group, as does the absence of stiff setae dorsally on the male palpal tibia. Males can easily be distinguished from those of all the other members of the group by their greatly elongated embolus, which occupies most of the retrolateral extent of the palpal bulb (Figs. 1, 2). As expected, females have concomitantly elongated copulatory ducts, the length of which is accommodated by lateral convolutions that are also unique (Figs. 3, 4). Measurements are expressed in mm.

**Male (holotype).**—Total length 2.02. Carapace 0.89 long, 0.67 wide. Femur II 0.55 long. Carapace light yellow, darkest anteriorly, rear of pars cephalica with dusky markings; abdominal dorsum dark gray, venter white; legs light yellow. Leg spination typical for genus except: femora I–IV p0-0-0, r0-0-0; patella III r0-0-0; tibiae III, IV p0-0-0, r0-0-0; metatarsi I–IV spineless. Terminal apophysis long, narrow, directed retrolaterally; embolus greatly elongated, making almost complete coil, dorsal half hidden inside cymbium (Fig. 1); retrolateral tibial apophysis triangular, distally narrowed, angled (Fig. 2).

**Female (allotype).**—Total length 2.24. Carapace 0.88 long, 0.66 wide. Femur II 0.56 long. Coloration as in male. Leg spination as in male except tibiae III, IV spineless. Anterior epigynal margin occupying full width of epigynum, with short posterolateral extensions (Fig. 3); epigynal ducts coiled laterally (Fig. 4).

**Distribution.**—Known only from Presidio County, West Texas, USA.

#### LITERATURE CITED

- Chamberlin, R.V. 1922. The North American spiders of the family Gnaphosidae. *Proceedings of the Biological Society of Washington* 35:145–172.
- Platnick, N.I. 1984. On the Gnaphosidae (Arachnida, Araneae) of the California Channel Islands. *Journal of Arachnology* 11:453–455.
- Platnick, N.I. & D.T. Corey. 1989. On a new spider of the genus *Drassyllus* (Araneae, Gnaphosidae) from Florida. *Journal of Arachnology* 17:114–115.
- Platnick, N.I. & M.U. Shadab. 1982. A revision of the American spiders of the genus *Drassyllus* (Araneae, Gnaphosidae). *Bulletin of the American Museum of Natural History* 173:1–97.

*Manuscript received 16 March 2006, revised 19 May 2006.*